

PTO 2005-1345

Translation from Russian of Author's Certificate No. 302944

Date of Application: September 14, 1967

Date of Publication: July 28, 1972, Bulletin No. 23

Inventors: V. B. RATINOV, S. G. YENISHERLOVA, Yu. L. KARABAN, Ye. P. GORBONOS, Ye. I. DOBROVOLSKI, N. M. VOSVILOV, I. L. RUDENKO, T. Ye. MOLCHANOVA, A. M. ALEKSEYEV, G. S. PODOLSKI, S. B. RYBAKOV, A. D. GORBONOS, G. D. KUCHERYAEVA, I. A. IOCHINSKAYA, V. I. SLAVYANOV, G. P. INOZEMTSEV, Ye. I. VORONOVA, and V. A. MOLCHANOV

Assignee: Moscow Highway Institute

Prior Art Documents: [none]

COMPOSITION FOR THE PREVENTION OF THE CONGEALING OF LOOSE MATERIALS AND THE ELIMINATION OF THE FORMATION OF ICING

The invention concerns compositions used for the prevention of the congealing of loose materials and the elimination of the formation of icing, for example, when road coverings are applied.

A known composition for the prevention of the congealing of loose materials and the elimination of the formation of icing contains chloride salts.

The objective of the invention is to prevent the metallic parts of transport means from corroding.

This is achieved in that the composition contains 50 – 90% calcium chloride and 10 – 15% calcium nitrite-nitrate.

The proposed composition may be used for the protection of various road coverings, e.g., concrete, from formations of icing, and also for the removal of firmly packed snow and the prevention of the congealing of loose materials.

The quantitative relationship in the mixture of CaCl_2 and $\text{Ca}(\text{NO}_3)+\text{Ca}(\text{NO}_2)_2$ depends on the content of calcium nitrate.

The proposed composition does not cause corrosion of metal due to the presence of calcium nitrate therein, eliminating the influence of the chlorides, which stimulate corrosion. The composition of calcium nitrite-nitrate and calcium chloride may be applied on the surface to be protected in a dry state, or as a paste or solution.

[Claim]

Composition for the prevention of the congealing of loose materials and the elimination of the formation of icing, containing metal chlorides, characterized in that, with the objective of preventing the corrosion of metal parts of transport means, it additionally contains calcium nitrite-nitrate with the following relationship of components in percent by weight:

Calcium chloride: 50 – 90

Calcium nitrite-nitrate: 10 – 50

Translations Branch
United States Patent and Trademark Office
January 12, 2005
Steven M. Spar